a mat filter folded into a cylindrical shape and pushed open on said supportive pipe to surround said supporting pipe;

a plastic filter casing with openings enclosing said mat filter and delimiting a filter chamber, said filter casing being formed from a flat blank with opposite ends thereof bent toward one another and joined together by a sealing seam, said mat filter having an exterior diameter larger than an interior diameter of said filter casing;

two end caps connected to said filter casing; and
one axial end of said mat filter is conical to facilitate introduction thereof in said filter
casing.

A filter element according to claim 10 wherein said ends of said filter casing are joined by a heat seal

12. A filter element according to claim 10 wherein said ends of said filter casing are joined by a heating element.

13. A filter element according to claim 10 wherein said ends of said filter casing are joined by an ultrasonic weld.

14. A filter element according to claim 10 wherein

said mat filter is pleated, comprises plastic material, and comprises an additional filter fold with a flush arrangement of mat filter edges on one another allowing said mat filter edges to be tightly joined.

- 15. A filter element according to claim 14 wherein said mat filter edges are joined by an ultrasonic weld.
- 16. A filter element according to claim 14 wherein said mat filter edges are joined by a heat seal.
- 17. A filter element according to claim 10 wherein said filter easing consists of recyclable plastic material.
- 18. A filter element according to claim 17 wherein said end caps consist of recyclable plastic material.
- A filter element according to claim 18 wherein
   said supporting pipe consists of recyclable plastic material.
- 20. A filter element according to claim 17 wherein said supporting pipe consists of recyclable plastic material.
- 21. A filter element according to claim 10 wherein said openings in said plastic filter casing are formed by punching out devices.

22. A filter element according to claim 21 wherein said openings are circular.



- 23. A filter element according to claim 10 wherein said sealing seams comprise intermittent contact points of said ends of said filter casing.
- 24. A filter element according to claim 10 wherein said sealing seam comprising an overlapping area of said ends of said filter casing.